ABSTRACT OF THE DISCLOSURE

A semiconductor integrated circuit includes a single instruction multiple data (SIMD) unit conducting a concurrent operation for a plurality of data items, a data buffer connectible to the SIMD unit, and a data transfer control unit for controlling transfer of data for the data buffer thereby, the data transfer control unit controls the transfer of data for a subsequent operation to the buffer in concurrence with the operation of the SIMD unit for the plural data items read from the data buffer and in concurrent with the operation of the SIMD unit, data for a subsequent operation is transferred to the data buffer.